

NEW AND INTERESTING RECORDS OF ADVENTIVE PLANTS FROM THE AUCKLAND INSTITUTE AND MUSEUM HERBARIUM 7

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Abstract. This seventh list of some recent additions to the Auckland Institute and Museum Herbarium (AK) and of re-determinations of earlier gatherings provides new records for some adventive species and further information on the distribution of others.

The acquisition of material by the AK Herbarium has been maintained as in former years by exchange with D.S.I.R., Botany Division, Christchurch (CHR) and the National Museum, Wellington (WELT) as well as by presentation from various collectors. This has included voucher specimens for new records and has helped to fill gaps made evident in my previous papers.

The nomenclature adopted in this paper is that published by the New Zealand Weed and Pest Control Society (1969) except for species dealt with in volume 3 of the *Flora of New Zealand* (Healy & Edgar 1980) and in the series of checklists published from time to time in the *New Zealand Journal of Botany* by members of the D.S.I.R. staff at Christchurch. In these last two works the date of the first record is that of first publication, not necessarily of the first finding, a distinction not always made by me in the past (see under *Papaver dubium* below); for greater precision and uniformity I intend following their procedure in future. For species not dealt with in any of the above works references are given to publications consulted.

Specimens are cited by the collector's numbers or in the absence of these by the AK number. Unless otherwise stated the specimens may be regarded as the only material of the species possessed by the Herbarium and, where no previous literature is cited, as first records to the best of my knowledge at the time of writing.

PAPAVERACEAE

Papaver dubium L.

Waitemata Co., Milford, waste area, 1978, E.B. Bangerter 5393.

In Bangerter (1980) I recorded two specimens from the Auckland area but omitted the above gathering as I was doubtful of the identification, since kindly confirmed by Dr Garnock-Jones, on account of its sparse pubescence. I also gave the first record as 1885,

G.M. Thomson, which appears at variance with that given in Garnock-Jones (1979) as Kirk (1899). The latter is more precise as the first published record; the former was not published until 1922 (Thomson 1922).

FUMARIACEAE

Fumaria densiflora DC.

Franklin Co., Pukekohe, 1979, R. Wood, AK 152040.

No specimen of this fumitory had been found according to Garnock-Jones (1979) up to that date. Mr A.E. Esler has since kindly supplied the above gathering to vouch for its recent discovery. The plant is said to be "troublesome in crops". Sell (1964) may be referred to for a description. The flowers are smaller and more densely crowded than in other adventive species in New Zealand.

CRUCIFERAE

Matthiola incana (L.) R.Br.

Hutt Co., between Pukerua Bay and Paekakariki, railway embankment near coast, 1979, P.J. Brownsey, AK 152498, (dupl. ex WELT).

According to Garnock-Jones (1979) stock as a naturalised plant is local but evidently widespread in distribution; it was first recorded by Kirk (1878) as *M. sinuata* from Castle Rock, Wellington. Several authors have since added further localities; the above gathering is here included as it fills a gap in the AK Herbarium.

CRASSULACEAE

Cotyledon orbiculata L.

Wellington, Moa Point, greywacke, 1979, T. Moss, AK 152496.

An account of this plant as one of a succulent element in adventive communities on coastal cliffs in Canterbury and Otago is given in Healy (1959, 1969). The above North Island gathering was acquired by exchange with WELT Herbarium.

POLYGONACEAE

Fagopyrum esculentum Moench.

Whangarei Co., Whangarei, T.F. Cheeseman, AK 70005.

Kirk (1870) recorded buckwheat from the Auckland district and Armstrong (1872) from Canterbury. Thomson (1922) and Allan (1940) repeated Kirk's record, the former

commenting that it "is largely grown by bee-keepers". Later Healy (1976) still only described it as rare and casual, whilst Connor (1977) stated "occasionally escapes from cultivation but nowadays rarely grown as a crop". Unfortunately Cheeseman's specimen is un-dated.

Polygonum punctatum E11.

Waitemata Co., Paremoremo Creek, 1978, R.O. Gardner 1990.

To the specimen cited in Bangerter (1980) the above has been added as a second gathering, although it was determined as *Polygonum* cf. *punctatum*. Dr Gardner's notes state "common on open places on stream edges" and of the leaves "peppery, not blotched, flat edged". Fruits mounted on the sheet are smooth and glossy; the tepals are white. Peppery leaves are characteristic of *P. hydropiper* but all the other characters tend towards *P. punctatum*.

CHENOPODIACEAE

Atriplex hortensis L.

Auckland, Mt Albert, Ferner Avenue, 1980, A.E. Esler, AK 152049.

Given as a first record in Healy (1958) but in South Island localities only, garden orache is also listed in Healy (1969) for Canterbury. The above North Island gathering was kindly presented by Mr A.E. Esler, who has written on the label "three plants appeared in cultivated soil in garden". Aellen (1964) provides a description.

BALSAMINACEAE

Impatiens balsamina L.

Auckland, Milford, roadside bank, 1980, E.B. Bangerter 5468.

This balsam, no doubt a garden escape, was growing among viatical adventives all of which have since succumbed to the spraying of weedkiller. I have not found any other reference to the plant as an escape although it is often grown in gardens. The species is described in Moore (1968).

CUCURBITACEAE

Sechium edule Swartz

Auckland, Mt Albert Research Centre, 1980, A.E. Esler, AK 152084, det. K.W. Hammett.

This specimen of choko was presented by Mr A.E. Esler as a voucher. Noted on the label is "growing on tall wire fence, apparently naturalised." A detailed description may be found in Bailey (1947).

HYPERICACEAE

Hypericum calycinum L.

Hokianga Co. North Hokianga, roadside near Mitimiti, 1977, A.E. Wright 1624.

Smith (1904) included this species as naturalised in Ashburton. Subsequent authors in dealing with the rose of Sharon (or Aaron's beard) have not given precise localities, until Healy (1969) listed it for Canterbury. Its particular liking for older cemeteries is pointed out in Healy (1976).

ROSACEAE

Acaena agnipila Gdg. var. *aequispina* Orchard.

Rangitikei Co., Marton, W. Townson no. 13, AK 75477, 75478 (as *Poterium officinale*).

This undated but early gathering was re-determined by Dr Orchard in 1974 and was therefore not included in his list of specimens examined (Orchard 1973).

PAPILIONACEAE

Coronilla varia L.

Nelson, 1878, T.F. Cheeseman, AK 75690; Auckland, southern motorway on-ramp from Grafton Road, 1980, A.E. Wright 3627.

The first specimen above is a potential voucher for the first record of crown vetch in Cheeseman (1906) "garden escape in vicinity of Nelson", repeated by Thomson (1922) and Allan (1940). The record is also noted in Webb (1980) where it is pointed out that "this species is sometimes planted to stabilise road cuttings." The recent specimen indicates its occurrence in the North Island.

Trifolium scabrum L.

Auckland, Devonport, T.F. Cheeseman, AK 76577; Auckland, Mt Wellington, volcanic cone, 1980, A.E. Wright 3629.

Although his specimen is undated Cheeseman (1883) recorded rough clover from "beach at Devonport, abundant in Dec. 1880", which constitutes the first record as noted in Webb (1980). Kirk (1899) reported it from "Auckland, Hawkes Bay, Wellington etc." According to Healy (1976) herbarium material examined by him proved to be *T. striatum* and the only certain occurrence was from Miranda, Firth of Thames in 1958.

ELAEAGNACEAE

Elaeagnus pungens Thunb.

Coromandel Co., roadside escape, 1966, R.C. Cooper, AK 127105; Cavalli Island Group, Motukawanui, garden remnants from around former homestead, 1979, A.E. Wright 3081.

Elaeagnus is included in the Appendix of Allan (1940) but with no locality given. A general statement in Matthews (1975) states 'largely employed as a hedge, more so in the past than today'. North Island records may be found in Wright (1979) for Cavalli Islands, Beaver (1980) for the Auckland area and Esler (1980) for Motuihe in the Hauraki Gulf.

UMBELLIFERAE

Anthriscus caucalis Bieb.

Hutt Co., Upper Hutt, Harcourt Park, under *Cupressus macrocarpa*, 1979, T.C. Moss, AK 152497 (dupl. ex WELT); Ashburton Co., Elgin, pasture paddock 1979, J.G. Spell, AK 150792 det. C.J. Webb (dupl. ex CHR 355739).

The distribution of beaked parsley may be found in Webb (1978), where the first record (as *A. vulgaris* Pers.) is attributed to Thomson (1922) who published the finding of the plant in 1917 by Mr Warden at Wyndham, Otago. Allan (1940) repeated the record and the species appears in the list of Canterbury adventives in Healy (1969). It was known from 'the northern half of the North Island and eastern Southland' according to Matthews (1975). The above specimens, acquired from Wellington and Christchurch respectively, are welcome additions to the AK Herbarium.

LOGANIACEAE

Buddleia davidii Franch.

Waitemata Co., Huia, garden escape, 1951, K. Wood, Auckland Botanical Society's Auckland Collection 5417.

Since the 1973 specimen of buddleia was recorded, in Bangarter (1977) as the only example in the Herbarium, several later gatherings have been added. The above, however, is a much earlier one.

COMPOSITAE

Lactuca serriola L.

Auckland, Devonport, Mt Victoria, growing on rough weedy scoria heap, 1980, A.E. Wright 3511.

Cheeseman (1925) recorded prickly lettuce from Onehunga, 1912, repeated by Thomson (1922) and Allan (1940). It is listed in Healy (1969) for Canterbury but no localities are mentioned in Healy (1976). Although it was known from a few more South Island localities, Matthews (1975) said of it 'rare to infrequent in the North Island'. The AK specimen shows the characteristic olive-grey achenes.

Petasites fragrans (Vill.) C. Presl.

Auckland, steep bank above Churchill Road, Constitution Hill, 1981, A.E. Wright 3823.

Winter heliotrope is listed in the Appendix of Allan (1940) but with no locality. That it is particularly addicted to cemeteries may be gleaned from Healy (1969, 1973), Connor (1977) and Esler (1978). There is no specific locality given in Matthews (1975) but from him and other authors it is evident that the plant is never found far from man's horticultural activities. A note on the label of the above gathering states "well established colony beneath oak trees bordering road."

Soliva valdiviana Phil.

Waitemata Co., Milford, roadside grass verge, 1981, E.B. Bangarter 5496.

A note on this species of Onehunga-weed appeared in Bangarter (1978). In spite of its being probably the commonest species, this is only the second sheet in the Herbarium, the locality being further north than the first.

POLEMONIACEAE

Cobaea scandens Cav.

Wellington, Chaytor Street, climbing over vegetation, 1979, P.J. Brownsey AK 152738; Auckland, Mt Albert, scrambling over shrubs, 1980, A.E. Esler, AK 152045.

Day's Bay, Wellington, is the locality for the first record of cobaea in Healy (1946). From Healy (1973) and Adams (1980), where it is figured, we learn that this climber invades the fringes of bush communities. Some localities in the Manawatu area are given in Esler (1978) and Beever (1980) includes it in a list for an Auckland area. The above two gatherings fill yet another gap in the Herbarium.

LILIACEAE

Ipheion uniflorum (Lindl.) Raf.

Hokianga Co., Waipoua State Forest, Kawerua, 1976, A.E. Wright 1393; Wellington, Paraparaumu, 1978, P.J. Brownsey, AK 149152.

Healy & Edgar (1980) have given only the South Island as the distribution of the spring star-flower. The above gatherings indicate its occurrence in the North Island.

GRAMINEAE

Echinochloa crus-gavonis (H.B.K.) Schultes

Matamata Co., Matamata, railway line, 1977, D.J. Court, AK 143600.

Since my earlier records (Bangarter 1975), a number of Auckland specimens have been added to the Herbarium. The above adds a new area to the distribution.

Setaria palmifolia (Koen.) Stapf.

Auckland University Grounds, escape from cultivation, 1977, J.E. Braggins, AK 151346, det. A.E. Wright 1980 (dupl. ex AKU).

This grass was "getting established in many places" according to Mr A.E. Esler in a letter dated May 1979. The above specimen was kindly presented by Dr Braggins as a duplicate from the Auckland University Herbarium. A description and illustration may be found in Henty (1969), where it is said to be cultivated as a vegetable in New Guinea.

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